

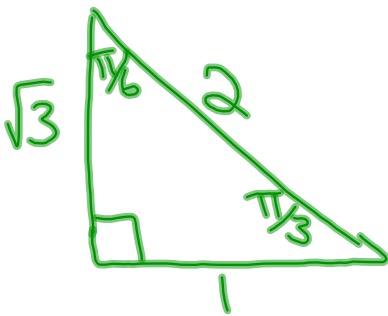
$$\tan x = \frac{\sqrt{3}}{3}$$


$$\tan x = \frac{1}{\sqrt{3}} \quad \frac{0}{A}$$


Where is  $\tan +$ ? Q1, Q3

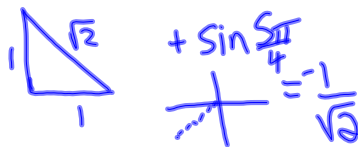
$$RAA = \pi/6$$

$$\theta = RAA = \pi/6 \quad \theta = \pi + \frac{\pi}{6} = \frac{7\pi}{6}$$



$$\begin{aligned}
 & (\cos \frac{11\pi}{6})^2 + (\sin \frac{2\pi}{3})^2 \\
 5) & \cos^2(\frac{11\pi}{6}) + \sin^2(\frac{2\pi}{3}) \\
 &= \frac{3}{4} + \frac{3}{4} \quad (\frac{\sqrt{3}}{2})^2 + (\frac{\sqrt{3}}{2})^2 \\
 &= \frac{3}{2}
 \end{aligned}$$


$$\begin{aligned}
 1.) & \sin \frac{11\pi}{6} \\
 \text{RAA} &= \pi/6 \quad \sin \frac{\pi}{6} = \frac{1}{2} \\
 & \therefore \sin \frac{11\pi}{6} = -\frac{1}{2}
 \end{aligned}$$


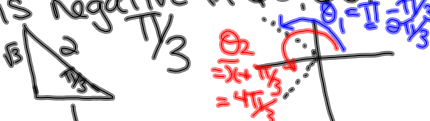
$$\begin{aligned}
 2.) & \cos \frac{\pi}{4} = \frac{1}{\sqrt{2}} \\
 & \sin \frac{5\pi}{4} = -\frac{1}{\sqrt{2}}
 \end{aligned}$$


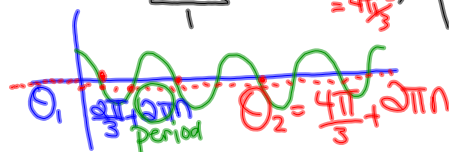
$$\frac{1}{\sqrt{2}} - \frac{1}{\sqrt{2}} = 0$$

$$\begin{aligned}
 3.) & \cos \frac{6\pi}{9} \quad \text{RAA} = \pi/3 \\
 &= \cos \frac{2\pi}{3} \quad \cos \frac{\pi}{3} = \frac{1}{2} \\
 \therefore & \cos \frac{2\pi}{3} = -\frac{1}{2}
 \end{aligned}$$

$$\begin{aligned}
 6.) & \sin^2(\frac{4\pi}{7}) \\
 & \approx 0.95
 \end{aligned}$$

$$\begin{aligned}
 7.) & \sin x = -2 \\
 & \text{Not possible} \\
 & \text{out of range of sin.}
 \end{aligned}$$

$$\begin{aligned}
 8.) & \cos x = -\frac{1}{2} \\
 & \text{Cos is negative in Q2, Q3} \\
 \text{RAA} &= \pi/3
 \end{aligned}$$




$$\begin{aligned}
 10) & \sin^2 x + 5\sin x = -6 \\
 & \sin^2 x + 5\sin x + 6 = 0 \\
 & \text{let } y = \sin x \\
 & y^2 + 5y + 6 = 0
 \end{aligned}$$